

REMARKS / ARGUMENTS

The present application includes pending claims 1-17, all of which have been rejected. Claims 1, 6 and 11 have been amended to clarify the claim language. The Applicant points out that the amendments to the claims find support at least in the related detailed description of Fig. 1. The Applicant respectfully submits that the claims define patentable subject matter.

Claims 1-3, 5-8, 10-13 and 15-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over USPP 2004/0032905 (“Dittrich”) in view of USP 6,088,390 (“Russell”). Claims 4, 9 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dittrich and Russell in view of USPP 2003/0123586 (“Yen”). Claim 17 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim and Russell in view of USPP 2004/0125884 (“Wei”). The Applicant respectfully traverses these rejections at least based on the following remarks.

REJECTION UNDER 35 U.S.C. § 103

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure, Rev. 6, Sep. 2007 (“MPEP”) states the following:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning

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with some rational underpinning to support the legal conclusion of obviousness."

See the MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), and *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). Further, MPEP § 2143.01 states that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art" (citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007)). Additionally, if a *prima facie* case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

I. The Proposed Combination of Dittrich and Russell Does Not Render Claims 1-3, 5-8, 10-13 and 15-16 Unpatentable

The Applicant now turns to the rejection of claims 1-3, 5-8, 10-13 and 15-16 as being unpatentable over Dittrich in view of Russell.

A. Independent Claims 1, 6 and 11

With regard to the rejection of independent claim 1 under 35 U.S.C. § 103(a), the Applicant submits that the combination of Dittrich and Russell does not disclose or

suggest at least the limitation of “said block code based error correction scheme utilizes a feed forward equalizer filter for filtering at least a feedback signal comprising information from said at least one error correction code word, and wherein **said feedback signal comprises phase data**” as recited by the Applicant in independent claim 1.

The Office Action states the following:

“1. As per claim 1, Dittrich et al teaches a method for equalization in a communications system, the method comprising: Decision feedback equalizer that is used for removing post cursor inter-symbol interference (See fig.1 elements DFE and 470 paragraph [0007]) in a block code based error correction scheme (see fig.1 element 450 and paragraphs [0038] [0061] [0064]) wherein said block code based error correction scheme is utilized utilizes a feed forward equalizer filter for filtering (see abstract and fig.1 element 410) at least a feedback signal (see fig.1 element G) comprising information from said at least one error correction code word (see abstract and paragraph [0047] [0060] [0063]).

2. However Kim (Dittrich) does not teach removing post cursor inter-symbol interference within at least one error correction code word in a block code.

3. Russel et al teaches a DFE for removing post cursor inter-symbol interference within at least one error correction code word in a block code (see fig.5 element 504 and 506 and abstract and col.1, lines 45-67 and col.2, lines 18-40 and col.5, lines 1-35). ”

See the Office Action at pages 2-3. The Examiner relies for support on Dittrich’s Fig. 1, and equates Dittrich’s feed forward equalizer 410 to Applicant’s “feed forward equalizer”. The Examiner also equates Dittrich’s feed forward equalizer 410, which receives a feedback adjust coefficient “g” (the alleged “feedback signal”) from an update apparatus 470, to Applicant’s “...filtering at least a portion of feedback signal

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comprising information from said at least one error correction code word," as recited in Applicant's claim 1.

However, Dittrich does not disclose that the feedback adjust coefficient "g" (the alleged "feedback signal") includes any phase data in the filtered feedback signal. The Examiner relies on Russell to disclose the alleged "block code based error correction scheme", but Russel still does not overcome Dittrich's above deficiencies.

Therefore, the combination of Dittrich and Russel does not disclose or suggest "**filtering at least a feedback signal** comprising information from said at least one error correction code word, and wherein said feedback signal comprises phase data," as recited in Applicant's claim 1.

Accordingly, the proposed combination of Dittrich and Russell does not render independent claim 1 unpatentable, and a *prima facie* case of obviousness has not been established. The Applicant submits that claim 1 is allowable. Independent claims 6 and 11 are similar in many respects to the method disclosed in independent claim 1, and are also submitted to be allowable for the reasons stated above with regard to claim 1.

B. Rejection of Dependent Claims 2-3, 5, 7-8, 10, 12-13 and 15-16

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 6 and 11 under 35 U.S.C. § 103(a) has been overcome and requests that the rejection be withdrawn. Additionally, claims 2-3, 5, 7-8, 10, 12-13, and

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15-16 depend from independent claims 1, 6 and 11, and are, consequently, also respectfully submitted to be allowable.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 2-3, 5, 7-8, 10, 12-13, and 15-16.

II. The Proposed Combination of Dittrich, Russell and Yen Does Not Render Claims 4, 9 and 14 Unpatentable

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 6 and 11 under 35 U.S.C. § 103(a) has been overcome and requests that the rejection be withdrawn. Yen does not overcome the deficiencies of Dittrich and Russell. Claims 4, 9 and 14 depend from independent claims 1, 6 and 11, respectively, and are, submitted to be allowable.

III. The Proposed Combination of Dittrich, Russell and Yen Does Not Render Claim 17 Unpatentable

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 6 and 11 under 35 U.S.C. § 103(a) has been overcome and requests that the rejection be withdrawn. Wei does not overcome the deficiencies of Dittrich and Russell. Claim 17 depend from independent claim 11, and is, submitted to be allowable.

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CONCLUSION

Based on at least the foregoing, the Applicant believes that all claims 1-17 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and requests that the Examiner telephone the undersigned Patent Agent at (312) 775-8093.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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